

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1 - 18. (Canceled)

19. (Currently amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a BCMA (B Cell Maturation Antigen) polypeptide effective to inhibit ~~B-cell expression or immunoglobulin expression~~ B-cell growth or immunoglobulin production, or both, wherein the BCMA polypeptide comprises:

- (a) an amino acid sequence that binds to BAFF (B-cell activating factor of the TNF family; SEQ ID NO:9) and is at least ~~80% identical~~ 95% identical to amino acids 1 to 51 of SEQ ID NO:1 ~~or a fragment thereof; or~~
- (b) an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~80% identical~~ 95% identical to amino acids 8 to 41 of SEQ ID NO:1;
or
- ~~(c) the amino acid sequence of (a) or (b) fused to a heterologous amino acid sequence.~~

20. (Currently amended) The pharmaceutical composition of claim 19 wherein the BCMA polypeptide comprises:

- (a) amino acids 1 to 51 of SEQ ID NO:1 ~~or a fragment thereof; or~~
- (b) amino acids 8 to 41 of SEQ ID NO:1; ~~or~~
- (c) ~~the amino acid sequence of (a) or (b) fused to a heterologous amino acid sequence.~~

Claims 21 - 24. (Canceled)

25. (Currently amended) The pharmaceutical composition of ~~claim 19~~ claim 20 wherein the BCMA polypeptide comprises amino acids 1 to 51 of SEQ ID NO:1 ~~or a fragment thereof that binds to BAFF.~~

26. (Currently amended) The pharmaceutical composition of ~~claim 19~~ claim 20 wherein the BCMA polypeptide comprises amino acids 8 to 41 of SEQ ID NO:1.

27. (Currently amended) The pharmaceutical composition of claim 19 wherein the BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~85% identical~~ 95% identical to amino acids 8 to 41 of SEQ ID NO:1.

Claim 28. (Canceled)

29. (Currently amended) The pharmaceutical composition of claim 19 wherein the BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~85% identical~~ 95% identical to amino acids 1 to 51 of SEQ ID NO:1 ~~or a fragment thereof~~.

Claims 30 - 31. (Canceled)

32. (Currently amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a BCMA polypeptide effective to inhibit ~~B-cell expression or immunoglobulin expression~~ B-cell growth or immunoglobulin production, or both, wherein the BCMA polypeptide comprises:

- (a) an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~80% identical~~ 95% identical to amino acids 1 to 51 of SEQ ID NO:1-
~~or a fragment thereof; or~~
- (b) an amino acid sequence that binds to ~~BAFF~~ to a polypeptide consisting of the sequence of SEQ ID NO:9 and is at least ~~80% identical~~ 95% identical to amino acids 8 to 41 of SEQ ID NO:1; ~~or~~
- (c) ~~the amino acid sequence of (a) or (b) fused to a heterologous amino acid sequence,~~

and wherein the BCMA polypeptide does not comprise ~~the transmembrane domain of~~
BCMA amino acids 53 to 81 of SEQ ID NO:1.

33. (Currently amended) The pharmaceutical composition of claim 32 wherein
the BCMA polypeptide comprises an amino acid sequence that binds to BAFF
(SEQ ID NO:9) and is at least ~~85% identical~~ 95% identical to amino acids 1 to 51 of
SEQ ID NO:1 ~~or a fragment thereof.~~

34. (Canceled)

35. (Currently amended) The pharmaceutical composition of ~~claim 34~~ claim 33
wherein the BCMA polypeptide comprises amino acids 1 to 51 of SEQ ID NO:1 ~~or a~~
~~fragment thereof that binds to BAFF.~~

36. (Currently amended) The pharmaceutical composition of claim 32 wherein
the BCMA polypeptide comprises an amino acid sequence that binds to BAFF
(SEQ ID NO:9) and is at least ~~85% identical~~ 95% identical to amino acids 8 to 41 of
SEQ ID NO:1.

37. (Canceled)

38. (Currently amended) The pharmaceutical composition of ~~claim 37~~ claim 36 wherein the BCMA polypeptide comprises amino acids 8 to 41 of SEQ ID NO:1.

39. (Currently amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a polypeptide effective to inhibit ~~B-cell expression or immunoglobulin expression~~ B cell growth or immunoglobulin production, or both, wherein the polypeptide comprises a BCMA polypeptide consisting essentially of:

- (a) an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~80% identical~~ 95% identical to amino acids 1 to 51 of SEQ ID NO:1 ~~or a fragment thereof~~; or
- (b) the amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~80% identical~~ 95% identical to amino acids 8 to 41 of SEQ ID NO:1.

40. (Currently amended) The pharmaceutical composition of claim 39 wherein the BCMA polypeptide consists essentially of an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~85% identical~~ 95% identical to amino acids 1 to 51 of SEQ ID NO:1 ~~or a fragment thereof~~.

41. (Canceled)

42. (Currently amended) The pharmaceutical composition of ~~claim 41~~ claim 40 wherein the BCMA polypeptide consists essentially of amino acids 1 to 51 of SEQ ID NO:1 ~~or a fragment thereof that binds to BAFF.~~

43. (Currently amended) The pharmaceutical composition of claim 39 wherein the BCMA polypeptide consists essentially of an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~85% identical~~ 95% identical to amino acids 8 to 41 of SEQ ID NO:1.

44. (Canceled)

45. (Currently amended) The pharmaceutical composition of ~~claim 44~~ claim 43 wherein the BCMA polypeptide consists essentially of amino acids 8 to 41 of SEQ ID NO:1.

46. (Currently amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and an amount of a soluble BCMA polypeptide effective to inhibit ~~B-cell expression or immunoglobulin expression~~ B-cell growth or immunoglobulin production, or both, wherein the soluble BCMA polypeptide comprises:

- (a) an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~80% identical~~ 95% identical to amino acids 1 to 51 of SEQ ID NO:1-
~~or a fragment thereof; or~~
- (b) an amino sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~80% identical~~ 95% identical to amino acids 8 to 41 of SEQ ID NO:1; ~~or~~
- ~~(c) the amino acid sequence of (a) or (b) fused to a heterologous amino acid sequence.~~

47. (Currently amended) The pharmaceutical composition of claim 46 wherein the soluble BCMA polypeptide comprises an amino acid sequence that binds to BAFF (SEQ ID NO:9) and is at least ~~85% identical~~ 95% identical to amino acids 1 to 51 of SEQ ID NO:1 ~~or a fragment thereof~~.

48. (Canceled)

49. (Currently amended) The pharmaceutical composition of ~~claim 48~~ claim 47 wherein the soluble BCMA polypeptide comprises amino acids 1 to 51 of SEQ ID NO:1 ~~or a fragment thereof that binds to BAFF~~.

50. (Currently amended) The pharmaceutical composition of claim 46 wherein the soluble BCMA polypeptide comprises an amino acid sequence that binds to BAFF

(SEQ ID NO:9) and is at least ~~85% identical~~ 95% identical to amino acids 8 to 41 of
SEQ ID NO:1.

51. (Canceled)

52. (Currently amended) The pharmaceutical composition of ~~claim 51~~ claim 50
wherein the soluble BCMA polypeptide comprises amino acids 8 to 41 of SEQ ID NO:1.

53. (New) The pharmaceutical composition of any one of claims 19, 20, 25-27,
29, 32, 33, 35, 36, 38, 46, 47, 49, 50, and 52, wherein the BCMA polypeptide further
comprises a heterologous amino acid sequence.

54. (New) The pharmaceutical composition of claim 53, wherein the
heterologous amino acid sequence comprises an Fc domain of an immunoglobulin.

55. (New) The pharmaceutical composition of any one of claims 39, 40, 42, 43,
and 45, wherein the BCMA polypeptide is fused to a heterologous amino acid
sequence.

56. (New) The pharmaceutical composition of claim 55, wherein the
heterologous amino acid sequence comprises an Fc domain of an immunoglobulin.